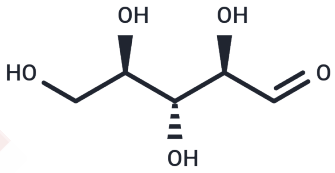
Data Sheet (Cat.No.T4786)

TargetMol

D-Ribose(mixture of isomers)

Chemical Properties



CAS No. : 50-69-1

Formula: C5H10O5

Molecular Weight: 150.13

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year
Actual storage temperature shall be subject to the COA.

Biological Description

Description	D-Ribose(mixture of isomers) (D-(-)-Ribose), commonly referred to as simply ribose, is a five-carbon sugar found in all living cells. Ribose is not an essential nutrient because it can be synthesized by almost every tissue in the body from other substances, such as glucose. It is vital for life as a component of DNA, RNA, ATP, ADP, and AMP.
Targets(IC50)	Endogenous Metabolite

Solubility Information

Solubility	DMSO: 250 mg/mL (1665.22 mM),Sonication is recommended. H2O: 100 mg/mL (666.09 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+90% Saline: 10 mg/mL (66.61 mM),Solution. 10% DMSO+40% PEG300+5% Tween 80+45% Saline: 2 mg/mL (13.32 mM),Sonication is recommended. *Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.*

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	6.6609 mL	33.3045 mL	66.6089 mL
5 mM	1.3322 mL	6.6609 mL	13.3218 mL
10 mM	0.6661 mL	3.3304 mL	6.6609 mL
50 mM	0.1332 mL	0.6661 mL	1.3322 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Dhanoa TS, et al. Ribose: more than a simple sugar? Curr Sports Med Rep. 2007 Jul;6(4):254-7.